MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2018/2019

DMA2023 – DIGITAL SOUND PRODUCTION

(All sections / Groups)

04 MARCH 2019
2:30 p.m – 4:30 p.m
(2 Hours)

INSTRUCTIONS TO STUDENTS

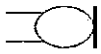
1. This Question paper consists of 5 pages with 5 questions only.
2. Answer **FOUR** out of **FIVE** questions. All questions have sub-questions and the distribution of the marks for each sub-question is given
3. Please write all your answers in the Answer Booklet provided.

Question 1

Knowing the **audio signal flow** is absolutely critical to a sound engineer or sound producer's success. Using this information, the engineer or producer can quickly TROUBLESHOOT the likely causes of common problems, and can even narrow down the possibilities of unexpected major problems.

The Soundlab in 3009 is equipped with a Behringer x32 digital console, Behringer B2-Pro condenser microphone, KRK ROKIT 8 studio monitor speakers and a desktop PC. The digital console is also used as the audio interface for the recording system.

Schematic symbol:

Schematic Symbol	Equipment
	Behringer x32 digital console
	Behringer B2-Pro condenser microphone
	KRK ROKIT 8 studio monitor speakers
	Desktop PC

Using the **schematic symbols** above **illustrate/draw and label** the audio signal flow for the 3009 Soundlab starting from the microphone until the speakers.

[10 marks]

Continued .....

Question 2

A **Digital Audio Workstation** (DAW) is an electronic system designed to record, edit and playback digital audio. A key feature of DAWs is the ability to freely manipulate recorded sounds. Many DAWs, especially computer-based DAWs, have MIDI recording, editing and playback capabilities. Technically, a DAW is more than just the software running on your computer.

a) **List** the **hardware** and **software** that you required for a basic DAW setup for a home studio.

[5 Marks]

b) List the **type of interfaces** that can be used as a soundcard in a DAW setup.

[5 Marks]

Question 3

Creating a sound design involves speech, sound effects, and music underscoring. All sound—speech, sound effects, and music—is made up of the same basic elements. Because each element contains certain characteristics that affect our response to sound,

List and briefly **describe** five (5) of these **elements** of sound structure.

No.	Elements	Description
1		
2		
3		
4		
5		

[10 marks]

Continued .....

Question 4

A **music editor** is usually a trained musician, which is a necessity when working with the composer. That said, **editing music** is difficult to discuss in any detail because it involves using the notes, chords, rhythms, and other features of abstract, temporal sound.

In music editing there are several **considerations** to be considered by the editor. Briefly **list** and **describe** five (5) of those considerations.

No.	Considerations	Description
1		
2		
3		
4		
5		

[10 Marks]

Continued .....

Question 5

The analogy can be made that **microphones** are to audio production what colors are to painting. The more colors and hues available to a painter, the greater the possibilities for coloration on a visual canvas.

In recording sound the more types of microphones there are, the greater variety of tones on the sonic palette and, hence, the greater the possibilities for coloration in designing an aural landscape. There are three basic features to consider when choosing a microphone, or mic: operating principles, polar patterns, and sound response.

Based on your understanding of **basic microphone's principle** answer the following questions:

a) List the two (2) **types of microphones** that are commonly used in recording studio.

[2 marks]

b) Briefly **explain** what is a microphone's **polar pattern.**

[2 marks]

c) Draw the **directional characteristics** for the following microphone's polar pattern:
   i. Omni-directional
   ii. Cardioid
   iii. Figure-8

[6 marks]

End of Page.